

The Spectroscopic Study of Combustion Reactions,
4 pp.

RUSSIAN, ^{for} Zhur Fiz Khim, No 5, 1957, pp 1175-
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AF 1162048

Sci - Physics
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69, 455

X-Ray Structural Investigation of Galvanic
Nickel-Iron Alloys, by N. S. Fedorova,
5 pp.

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No 6, 1958, pp 1211-1213.

SLA 60-17789

Enl
Vol IV, No 5
Mar 62

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Effect of Boric Acid on the Cathodic Polarization in
the Electrodeposition of Nickel and Cobalt, by
Z. A. Solovaya, et al. UNCLASSIFIED

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 6, 1957,
pp 1248-1256.

Co-op Tr Scheme 551

Sci - Physics
Mar 59

82,036

The Gaseous Initiation by Nitrogen Dioxide of
the Liquid Phase Oxidation of Cyclohexane, by E. T.
Denisov, M. M. Emanuel. UNCL

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pp 1266-1275.

DEIR LIU (loan) M.342

ETS RI-1114

SLH-5-5545

Sci - Chem
Jul 59

Chief of Chem. Div.

C. E. J. R. L.

314 Secret Div.

Asst. Dir. Chem. Div.

C. E. J. R. L.

90, 148

Investigation of the Surface Properties of
Powdered Metallic Catalysts and Adsorbents by
the Charging Curve Method, by Yu. A. Polvyazkin,
A. I. Shlygin, 11 pp.

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pp 1305-1310. P911159868

AEC-ENE-Tr-195

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Sci/Phys
Jul 68

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Flow Mechanism Of Polyvinyl Chloride by V.A.
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No 6, 1957, pp 1328-1336.

CSIRO

Oct. 62

Sorption of Methanol Vapor on Dehydration Catalysts
Over a Wide Range of Temperatures, by I. V.
Smirnova, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 6, 1957.
pp 1337-1343.

ATS RJ-1275

Sci - Phys, Chem
Apr 60

114, 567

S-78/60

(NY-3552).

The Separation of Stable Isotopes of Nitrogen by
the Chemical Exchange Method. I., by G. M. Tanchanov,
I. A. Samokhin, A. A. Ranzayeva, et al, 13 pp.

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pp 1352-1358.

JPRS 2475

Sci - Res
May 60

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16 pp.

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AEC Tr 3213
SLA 61-10683

Sci - Chem

May 58

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Tetramethylethylene -- A New Inhibitor and Initiator
for the Cracking of Paraffinic Hydrocarbons, by
A. D. Stepankhovich, et al.

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ATS RJ-1178

Sci - Phys, Chem
Apr 60

114,543

Calculation of the Isotopic Effect in the Vapor
Pressure of Water and Methane, by G. G. Deviatykh,
5 pp.

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AEC Tr-4442

Sci - Phys, Chem
Oct 61

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Kinetics of the Hydrogenation of Butylene on a
Chromium-Aluminum Catalyst, by G. D. Lubarskiy,
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SLA 59-15484

Sci.
Oct 59
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Computation of Smoothing in the Electrochemical
Polishing of Metals, by S. I. Krichmar, 12 pr.

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SLA R-3125

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Jul 59

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Spectrophotometric Study of the Reaction Between
Sodium 1,3-Diboryl-2-(2'-Oxyazobenzene)-3,6-Naphthalene
Disulphonate and Magnesium Ions, by V. N. Tolmashov,
G. G. Iosadina, 13 pp.

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pp 1600-1605. 9093607

ADP: WARE Tr-21

W/11/1/1/1

Sci - Phys, Chem
Dec 61

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Turbulent Diffusion and Combustion of Atomized
Fuel in a Stream, by V. Ya. Bassevich.

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1957, pp 1619-1626.

Assoc Tech Serv RJ-1417
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Sci - Chem

Apr 59

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Electrical Theory of OzonizersII. Theory of the
Dynamic Characteristics of Ozonizers, by Yu.
Erel'yanov, Yu. Filippov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 7,
1957, XX pp 1628-1635.

CSIRO 4008

Sci - Electron
Aug 62

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Approximate Solution Of Certain Higher Degree
Equations Arising In Calculations Of Chemical
Equilibria 1. Nomographic Method. by A.V. Voronov.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol XXXI,
No 7, 1957, pp 1643-1649.

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Measurement of the Moisture Permeability of
Films of Synthetic Materials Using Water Labeled
With Tritium, by E. E. Finkel, 8 pp.

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pp 1650-1655.

AEC Tr 3310

Sci - Chem

Sep 58

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Studies of the Dehydrogenation of Butene-Butylene
Mixtures by Means of Radioactive Carbon C^{14} , by
O. V. Isagulyants, A. A. Balandin, O. K. Bogdanova,
M. B. Meyman, E. I. Popov.

RUSSIAN, *ibid.*, Zhur Fiz Khim, Vol XXXI, 1957, pp
1657, 1660.

Assoc Tech Ws Sv
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cia/evv AX-584

Sci - Chem
Feb 59

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GE-1

VYAKHIREV D. A., BRUK A. I.

The influence of experimental parameters on the chromatographic separation of substances in the gas or vapor phase

Der Einfluss von Versuchsparametern auf die chromatographische Trennung von Stoffen in der Gas- oder Dampfphase

Zhur. Fiz. Khim., 31, No. 8, 1713-1720 (1957) - German

E u r a t o m

Investigation of the Connection Between the
Electroconductivity and the Adsorption Properties
of Zinc Oxides, by I. A. Myasnikov, 19 pp.

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Sci -/Phys

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AEC TR 3301
CLA R-5061 + R-5081

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RUSSIAN TO FRENCH
070 77 62-28/68

On the Tautomerism of Some Heterocyclic
Derivatives. Part IV. The Spectra and
Structure of Benzenesulfonamides and
Sulfanilamides of the Thiazole and
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NTC-70-13086-07C

Feb 72

On the Relation Between the Dipole Moment and
Surface Tension, by O. A. Onipov, I. K. Shelomov,
10 pp.

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SLA R-3126

Mark D. Friedman

Sci

Jul 59

91,339

61-22855

Ostroumov, V. V.
MECHANICAL STRESSES IN ELECTROLYTIC DE-
POSITS OF PALLADIUM. Jan 60.
Order from MT MT Trans-59

Trans. of Zhurnal Fizicheskoi Khimii (USSR)
1957, v. 31, no. 8, p. 1812-1819.

DESCRIPTORS: *Palladium, Electrodeposition, Metal
coatings, Stresses

MT-59

(Chemistry-Physical, TT, v. 6, no. 5)

I. Ostroumov, V. V.
II. MT Trans-59
III. Tollemache, M. de O.
(Ot. Brit.)

180563

Office of Technical Services

The Kinetics of the Thermal Activation and De-
activation of Platinum Catalysts, by A. A.
Kopetskiy, et al.

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1957, pp 1820-1824.

REXX MT Trans-60

Sci
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S-138/60

(NY-37130.

Measuring the Melting Points of Aluminum and
Copper at Pressures up to 18,000 Kilograms
per Centimeter, by M. G. Gonikberg, G. P.
Shalchovskoy, V. P. Butuzov, 7 pp.

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1957, pp 1839-1842.

JPRS 2541

Sci - Phys
Apr 60

114, 713

The Physical Chemistry of Concentrated Ozone.
Part II. Investigation of the Synthesis of
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Reaction of Concentrated Ozone With Atomic
Hydrogen, by B. I. Kobzarev, et al.

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Navy Tr 1942/T-32

Sci - Chemistry

Dec 58

(Possibly GDSIR/TSL-109)

Coop Tr Sch 564

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S-76/68

(NY-3551).

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A Chemical Method for the Separation of Boron
Isotopes, by G. M. Pashchenkov, V. D. Moiseyev,
A. V. Makarov, 15 pp.

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pp 1851-1860.

JPRS 2519

Sci - Chem
Apr 60

AEC - 68

114, 715

- 4644

TT-62-29190

Frankin, V.N.
ETUDE DU MECANISME DE LA SEPARATION PAR
ELECTROLYSE DE L'HYDROGENE PAR INTRODUC-
TION A LA SURFACE DE L'ELECTRODE, DE
QUANTITES SUPPLEMENTAIRES D'HYDROGENE
ATOMIQUE (Oboissledovaniy Mekhanizma Elektroliti-
cheskogo Vydeleniya Vodoroda Metodom Voedeniya
Dopolnitel'nykh Kolichestv Atomarnogo Vodoroda na
Poverkhnost' Elektroda) (Investigation of Electrolytic
Hydrogen Evolution by the Addition of Atomic Hydrogen
to the Electrode Surface). 31p. (foreign text partially
included) 18reels. CNRS-VIII bis 790.
Order from OLS, ETC or CNRS \$1.15 TT-62-29190

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR)
1957, v. 31, no. 8, p.1875-1890.

DESCRIPTORS: *Electrolysis, Electrodes, *Hydrogen,
Surfaces, Atoms, Separation,

(Chemistry--Physical, TT, v. 11, no. 8)

I. Frankin, V.N.
II. CNRS-VIII bis 790
III. Centre National de la Recher-
che Scientifique, Paris

Office of Technical Services
European Translations Centre

Application de La Mesure De La Micro-Durete A
L'Etude Des Diagrammes D'Equilibre Binaires Et
Ternaires Des Systemes Metalliques. (Application
of the Microhardness Measurement to the Study of
the Diagrams of Binary and Ternary Equilibria of
Metallic Systems), by V. M. Glasov, V. N.
Vigdorovich (Vigdorovitch), G. A. Korolkov, 13 pp.

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1957, pp 1891-1897.

Reverse Translation
AEC/CEA-Tr-R510

Relation of Zero Charge Points of Certain Metals to
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*DSIR/TCL 110

Sci - Phys
Nov 58

Study of the Relation Between the Electrical Con-
ductivity and the Adsorptional and Sensitizing
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catalysis, by I. A. Myasnikov, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXXI, No 9, 1957,
pp 2005-2011.

ADS NP 171

Sci - Chem

Jan 59

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Kul'kova, N.V., and Temkin, M.I.
DÉTERMINATION DE L'ÉNERGIE LIBRE DE L'OXY-
GÈNÈ DANS LA COUCHÉ SUPERFICIELLE DES
CATALYSEURS D'OXYDATION. (C) (predelene Svo-
bodoi Enerzi Kislota v Poverkhnostnoi Sloe Oks-
idatsionnykh Katalizatorov. I.) (The Determination of the
Free Energy of Oxygen in the Surface Layers of
Oxidation Catalysts. I.), 26p. (foreign text included)
Trefis, CNRS (OH Lib), 450.
Order from OHS, 170, or CNRS \$2.60, F062-28155.

Firas, in *Journal of Thermal Analysis*, 1987, Vol. 46, No. 1, pp. 1-10.

DESCRIPTORS: *Carbon; Oxidation; *Oxygen; Energy; Surfaces; *Thin films; *Coatings; Adsorption; Chemical equilibrium

(Chen, 1997; Hsiao, 1997; Hsiao, 1998)

I. Kupkova, N.V.
II. Temkin, M.I.
III. CNRS-VIII bis 459
IV. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
 Foreign Language Acquisition Section

Antipin, L. N. and Dudyrev, V. K.
THE BEHAVIOR OF THE CARBON ANODE IN THE
ELECTROLYSIS OF CRYOLITE-ALUMINA MELTS.
[1962] 10p.

Order from K-H \$12.50

K-H 8024 d

Trans. of Zhurnal Fizicheskoi Khim[ia] (USSR)
1957, v. 31, [no. 9] p. 2032-2035.

DESCRIPTORS: *Cryolite, *Aluminum compounds,
Oxides, Fused materials, Electrolysis, *Electro-
chemistry, *Anodes (Electrolytic cell), Carbon.

(Chemistry--Physical TT, v. 9, no. 11)

63-12927

I. Antipin, L. N.
II. Dudyrev, V. K.
III. K-H-8024-d
IV. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

TT-64-30129

Office of Technical Services

Nature of the Chemical Bond in Thiocyanate Complexes of Transition Metals, by Z. V. Zvonkova.

RUSSIAN, per, Zhuk. Fiz. Khim., Vol XXXI, No 9, 1957, pp 2074-2077.

DSIR LLU RTS 1430

Sci - Chem

Aug 60

122,570

61-23774

Akhumov, E. I. and Rozen, B. Ya.
SUR LES REGLES D'ADSORPTION DU BROME ET
DE L'IODE PAR LES ADSORBANTS MINERAUX EN
PRESENCE DES CHLORURES ET SULFATES DE
SODIUM ET POTASSIUM [O Zakonomernostyakh
Adsorbtsii Broma i Yoda Mineral nymi Adsorbentami v
Prisutstvii Khloridov i Sul'fatov Natriya i Kaliya] [Em-
pirical Correlations in the Adsorption of Bromine and
Iodine by Mineral Adsorbents in the Presence of the
Chlorides and Sulfates of Sodium and Potassium] tr. by
Kefeli. 18 Jan 60 [6]p. 3 refs. CEA Trans. no. R 806
(text in French).

Order from OTS or SLA \$1.10

61-23774

Trans. in French of Zhurnal Fizicheskoi Khim[is]
(USSR) 1958, v. 32, no. 9, p. 2094-2096.

DESCRIPTORS: *Iodine, *Bromine, Adsorption, Gels,
*Catalysts, *Alumina-silica catalysts, Aluminum com-
pounds, Oxides, *Adsorbents, Chlorides, Sulfates.

(Chemistry--Physical, TT, v. 6, no. 7) (over)

- I. Akhumov, E. I.
- II. Rozen, B. Ya.
- III. CEA-tr-R806
- IV. Commissariat à l'Énergie
Atomique (France)

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Heat of Adsorption of N-Hexane and N-Heptane
Vapors on Silica Gels, by A. A. Isirikyan,
A. V. Kisilev, 12 p.

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No 9, pp 2127-2137.

SLA 60-10584

Sci
May 60
Vol 3, No 4

116, 788

Methods of Sealing Samples When Studying the
Kinetics of Catalytic Processes by the Diaphragm
Method, by G. P. Korneichuk, N. A. Stukanovskaya,

RUSSIAN, per, Zhur. Fiz. Khim, Vol XXXI, No 9,
1957, pp 2138, 2139.

ATM RJ-2534

Sol. - Chem
Dec 59

103978

Work With Alkali Metals, by P. P. Pugachevich, 6ypp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957, pp
2140-2142.

Australian AEC/E-27

Oct 59

Mise en evidence du radical hydroxyle libre
par les spectres d'absorption des produits
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9 pp.

RUSSIAN to FRENCH, per, ZH. Fiz.Khim., SSSR.,
Vol 31, No **10**, 1957., 90691344

CEA R-1653
Reverse Translation

Sci
Nov 62

Kobayashi, S. I.
 MÉCANISME DE LA CATALYSE. II (O Mécanisme
 Catalytique). On the Mechanism of Catalysis. I, I.
 61p. (foreign text included) 25 refs. CNRS-VIII bis
 462.

Order from U.S. ETC or CNRS \$6.60 TT-62-28187

Trans. in French of ~~Thermal Catalysis~~ ~~Thermal Catalysis~~
 (USSR) 1957, 12, 11, p. 2162-2183.

Trans. in English available from IC or SLA no 52, 70,
 ph. \$4.80 (as TT-59-11305, 1959), 2sp and from VTS
 527, 25 as VTS-1983R, 24p.

DESCRIPTOR: *Catalysis, *Thermo. V. Adsorption,
 Hydrogenation, *Thermodynamics, Hydrates, An-
 monia, from catalysis, Sulfur compounds, Dioxides,
 Oxidation, Ph. Chem. catalysts.

Chemistry--Physical, II, v. 11, no. 8)

TT-62-28187

I. Kobayashi, S. I.
 II. CNRS-VIII bis 462
 III. Centre National de la Recherche
 Scientifique, Paris

Office of Technical Services
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The Chemical Structure of the Surface of Quartz
and of Silica Gel and Its Hydration, by S. P.
Zhdanov, A. V. Kiselev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 10,
1957, pp 2213-2223.

ATS RJ-1276

Sci - Phys, Chem
Apr 60

114,568

8-75/60

(HX-3550).

The Separation of Stable Nitrogen Isotopes by
the Chemical Exchange Method, I.T., by G. M.
Panchenko, I. I. Serickhin, O. P. Malashnikov, 9 pp.

RUSSIAN, pt. 1, Zhur Fiz Khim, Vol XXV, No 10,
1957, pp 2824-2828.

JPRS 2527

Sci - Chem
Apr 60

115,360

Mechanism of Metallic Corrosion in Narrow Cavities
and Slits. III. Corrosion of Aluminium and Some
of Its Alloys, by I. L. Rosenfel'd, et al.
UNCLASSIFIED

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1957, pp 2328-2336.

Co-op Tr Sch 598

Sci - Min/Mat

Mar 59

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Belaschenko, D. K.

VISCOUS AND ELECTRICAL PROPERTIES OF
LIQUID BINARY ALLOYS AND THEIR RELATION
TO THE STRUCTURE OF THE LIQUID. [1960] 18p.
(8 figs. omitted) 9 refs.

Order from LC or SLA ml\$2.40, ph\$3.30 61-10271

Trans. of [Zhurnal Fizicheskoy Khimii (USSR) 1957
v. 31, no. 10, p. 2269-2277.

The hysteresis of the viscosity and the electrical conductivity of liquid alloys in the Cd-Sb, Pb-Tl and Bi-Tl systems was found. The alloys of the Sb-Sn and Cd-Cu do not develop hysteresis of these properties. A considerable influence of ordering on the properties of the systems was found. A tendency towards the appearance of anomalies according to the degree of removal from the ideal state was noticed. (The sequence is Pb-Tl Sb-Sn Fe-Ni Bi-Tl Cd-Sb Cd-Cu). (Author)

(Chemistry--Physical, TT, v. 5, no. 4)

61-10271

1. Alloys--Electrical properties
2. Alloys--Viscosity
1. Belaschenko, D. K.

143/89

Office of Technical Services

Some Problems in the Theory of Electro-Deposition
of Alloys IV. Oscillographic Study of Cathode
Potential in the Process of Alloy Deposition, by
Yu. M. Polukarov, K. M. Gorbunova, 13 pp.

RUSSIAN, per: Zhur Fiz Khim, Vol. XXXI, No 10, 1957,
pp 2281-2286.

ATS-4971416
SLA 59-19565

Sci
Jun 60
Vol. XXX, No 5

61-20969 719,057
ATS-RJ-2707

A Sensitive Method for the Determination of
Diffusion Coefficients, by V. A. Geodakyan,
A. A. Zhukhovitsky, 10 pp.

RUSSIAN, per. Zhur Fiz Khim, Vol XXXI, 1957,
pp 2295-2301. 9207632

AEC-Tr-5663

Sci - Phys
Jun 63

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On the Dissociation Energies of Molecules of the
Oxides of the Alkaline Earth Elements, by L. V.
Veits, L. V. Garvich, 15 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXVI, 1957,
pp 2304-2309. 9053622

ABO URL Tr-708

Sci. - Phys. Chem
Dec 61

177,442

The Diffusion of Phosphorus and Calcium in
Melts of $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2$ and $\text{CaO-P}_2\text{O}_5$, by O. A.
Yesin, Ye. S. Vorontsov, S. K. Chukharev,
10 pp

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 10,
1957, pp 2322-2327.

SLA 60-17711

Sci

ORS, Vol IV, No 3

Sep 60

129,410

On the Problem of Crystallization of Ultra-Pure
Substances, by P. G. Vadilo.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 10, 1957,
pp. 2375-2376. 76765

Navy Tr 2582/NRL 80

Sci - Chemistry
Jul 60

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Origin and Meaning of the Changing Energetic
Characteristics of the Catalytic Process, by
S. Z. Roginskiy, 10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 11,
1957, pp 2381-2390.

CSIRO

SLA R-5109

Sci - Chem
Apr 62

190,468

NOTED BY FREUCH
075 77-12-28/89

The Mechanism of Catalysis. Part 2. The
Mixed Heterogeneous-Chain Mechanism of Catalysis
by N. I. Kobzarev,

RUSSIAN, per, Zhur Pis Khim, Vol XXXI, No 11,
1957, pp 2391-2399.

Assoc Tech Serv RJ-1419
20K25R

Sci - Chem

Apr 59

85,304

Kravtsov, V. I. and Loginova, I. S.
THE DISSOLUTION MECHANISM OF CADMIUM
AND CADMIUM AMALGAM IN ACID SOLUTIONS
(O Mekhanizme Rastvoreniya Kadmiya i Amalgamy
Kadmiya v Rastvore Kislot). Oct 60 [14]p. 13 refs.
RTS 1716
Order from LC or S.L.A m\$2. 40, ph\$3. 30 61-13498

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1957,
v. 31, no. 11, p. 2438-2444.

The self-dissolution and the anodic dissolution of
cadmium and of amalgamated cadmium in sulphuric
acid solutions are shown to proceed at practically the
equilibrium potentials of the corresponding electrodes.
A method is indicated for determining, from the
-log α_{CdSO_4} curves, the effective cadmium sulphate
concentration at the surface of a cadmium (or amal-
gamated cadmium) electrode dissolving in sulphuric
acid. The activity coefficient of the cadmium ion in
solutions containing an excess of sulphuric acid
(Chemistry-Physics, TT, v. 5, no. 5) (over)

61-13498

- I. Cadmium--Chemical reactions
- I. Kravtsov, V. I.
- II. Loginova, I. S.
- III. RTS-1716
- IV. Department of Scientific and Industrial Research (Gt. Brit.)

147,012

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The Structure of Cu-Si Alloys and Their
Catalytic Activity in the Reaction With Ethyl
Chloride, by V. D. Krylov, Yu. N. Efremov.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXXI, No 11,
1957, pp 2522-2525.

Assoc Tech Serv NY-1395
" " " 56824R

Sel - Chem

Apr 59

85, 283

The Catalytic Effect of Solid Products in the
Reduction of Nickel and Copper Oxides by Hydrogen,
by V. V. Baldyrov, A. S. Ermolayev.

RUSSIAN, paper, Zhur Fiz Khim, Vol XXI, No 11,
1957, pp 2542-2570.

Assoc Tech Serv RJ-1393
" " " 14K25R

Sci - Chem

Apr 59

85,282

Method for Polarization Measurements in Poorly
Conducting Solutions, by V. A. Gus'kov, M. Ya.
Flobin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 11, 1957,
pp 2575-2576.

HIT Lincoln Lab

Sci - Phys

Apr 58

61, 494

An Apparatus For the Joint Determination of Viscosity,
Density and the Fusion-Solidification Temperatures,
by N. S. Dap. Babyreva, B. I. Markin, B. P. Bindas,
Yu. A. Silkin, K. V. Chmutov, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,
pp 2580-2583.

AEC Tr 3539

Sci - Phys
Mar 59

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61-23743

Mindovich, E. Ya.

DISCUSSION SUR LA RÉPARTITION D'UNE SUB-
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[ON THE DISTRIBUTION OF MATTER BETWEEN
TWO IMMISCIBLE PHASES] tr. by Schkaff. Reply to
the paper by F. S. Kulikov. 15 Dec 59 [11]p. 13 refs.
CEA Trans. no. R 779 (text in French).
Order from OTS or SLA \$1.60

61-23743

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1957, v. 31, no. 12, p. 2759. (Original
article pub. in Zhurnal Fizicheskoi Khimii (USSR) 1954,
v. 28, p. 2232ff).

DESCRIPTORS: Chemical equilibrium, *Picric acid,
*Water, *Nitrobenzenes, Benzenes.

(See also 61-19600)

(Chemistry--Physical, TT, v. 6, no. 7)

- I. Mindovich, E. Ya.
- II. Kulikov, F. S.
- III. Title: Répartition...
- IV. CEA-tr-R779
- V. Commissariat à
l'Énergie Atomique
(France)

Office of Technical Services

The Formation of Hydrogen Peroxide During
Oxidation of Formaldehyde, by A. M. Markovich,
L. F. Filippova. UNCL

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DSIR LLE M.1282

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On the Tautomerism of Certain Derivative
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Spectra and Structure of Certain Sulfanil-
amides, by Yu. N. Sheinker.
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
Vol 31, No 12, 1957, pp 2656--2662.
NTC-70-13189-07C

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Polukarov, Yu. and Gorbunova, K. M.
SOME PROBLEMS IN THE THEORY OF THE
ELECTRODEPOSITION OF ALLOYS. V. OSCILLO-
GRAPHIC INVESTIGATION OF THE CATHODE
POTENTIAL IN THE PROCESS OF DEPOSITION OF
AN ALLOY (THE SYSTEMS COPPER-ZINC, COPPER-
LEAD, AND NICKEL-COBALT). [1961] 7p. 6 refs.
Order from OTS or SLA \$1.10 61-20970

Trans. of Zhurnal Fizicheskoi Khimii (USSR)
1957, v. 31, no. 12, p. 2682-2689.
Another trans. is available from ATS as ATS-30M41R
[1960] 7p.

DESCRIPTORS: *Alloys, *Electrodeposition, copper
alloys, Cobalt alloys, Nickel alloys, Zinc alloys,
Lead alloys.

(Chemistry--Physical, TT, v. 7, no. 5) (over)

61-20970

I. Polukarov, Yu. M.
II. Gorbunova, K. M.
III. Title: Oscillographic ...

ATS-801141K
ATS-RJ-2708

Office of Technical Services

Study of High-Molecular Organosilicon Compounds
by the Methods of Infrared Spectroscopy, by
A. P. Kreskov, Yu. Ya. Mikhaylenko, Ye. A.
Kirichenko; 15 p.

RUSSIAN, per, Zhur Fiz Khimii, 1957, Vol XXXI,
No 12, pp 2690-2696.

SLA 59-17093

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Sci
Jan 60
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Some Characteristics of Oxygen Depolarisation
Processes, by A. I. Krasil'shchikov.

RUSSIAN, per, Zhur Fiz Khimii, Vol XXXI, No 12,
p 1957, pp 2706-2710.

CSIRO

Sci - Chem
Oct 62

171, 375

Lyzlov, Yu. V., Meechkovskaya, T. A., and
 Smartsev, A. G.
 THE INFLUENCE OF GELATIN ON THE FORMA-
 TION OF ELECTROLYTIC DEPOSITS OF COPPER
 (Vliyaniye Zhelatiny na Obrazovanie Elektrokhimicheskikh
 Osadkov Mgd) Sep 61 [11]p. 18 refs. RTS 1854
 Order from OTS for SLA \$1.60 61-28161

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1957,
 v. 31, no. 2, p. 220-224.

DESCRIPTORS: *Copper, *Deposits, *Electrolytic
 cells, *Cathodes (Electrolytic cell), *Gelatin, Elec-
 trolysis

With the aid of a microscope the surface of a micro-
 cathode was observed during the deposition of copper
 from an acid copper bath which contained gelatin as a
 brightener. The existence of a critical current den-
 (Chemistry--Physical, TT, v. 6, no. 12) (over)

61-28161

- I. Lyzlov, Yu. V.
- II. Meechkovskaya, T. A.
- III. Smartsev, A. G.
- IV. RTS-1854
- V. Department of Scientific
 and Industrial Research
 (Gt. Brit.)

Office of Technical Services

Mecanisme De La Corrosion Des Metaux Dans Des
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Inoxydables. (Mechanism of the Corrosion of
Metals in Narrow Fissures. IV. Corrosion of
Stainless Steel), by I. K. Marchakov, I. I.
Rosenfeld (Rosenfeld), 15 pp.

FRENCH from RUSSIAN, per, zhur fiz khim, Vol
XXXII, 1958, pp 66-72.

Reverse Translation
AEC/CEA-Tr-R609

A Study of the Oxidation of Metals Under the
Conditions of Glow Discharge in Oxygen, by
R. I. Kuznetsov, 16 pp.

RUSSIAN, Izv. Akad. Nauk SSSR, Vol XXXII, 1958,
pp 79-85.

AKC 3458

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The Electrocapillary Behavior of Unsaturated
Alicyclic and Aliphatic Hydrocarbons, by
M. A. Gerovich, G. F. Rybal'chenko.

RUSSIAN, per, Zhur Fiz Khim, Vol 32, No 1,
1958, pp 109-115.

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The Mechanism of the Electrolytic Oxidation
and Electrolytic Reduction of Some Compounds
on Platinum, by G. A. Martinyuk, A. I.
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DSIR LLU RTS 1177

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Kinetics of the Interaction Between
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Vol 32, 1958, pp 170-177

NTC 72-60220-07D

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Potentials by a Condenser Method, by E. Kh. Bursh-
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RUSSIAN, per, Zhurnal Fiz. Khim., SSSR, Vol XXXII,
No 1, 1958, pp 194, 195.

Navy Tr 1789/NRL 675

Sci - Eng

Jul 58

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Oxidizing Processes in Organic Systems Under the
Influence of Ionizing Radiation, by N. A. Bakh,
V. V. Burayeva, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958, N 12
pp 209-218.

Sci - Phys

Dec 58

ADC 3408

RTS/RT-1618

SIR LLU RTS 1010

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Alkylation of Benzene With Olefines, IV. On the
Mechanism of the Reaction, by N. M. Chirkov, et al.
UNCL

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pp 219-224.

*DSIR/TCL 115

Sci - Chem
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[Handwritten notes and signatures are visible in the background of the card.]

The Electrocapillary Behavior of Unsaturated
Alicyclic and Aliphatic Hydrocarbons, by M. A.
Gerovich and G. F. Rybal'chenko, 6 pp.
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pp 109-115. P911277567
ABC IS-Tr-64

Sci-Physics
Sept. 67

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The Theory of Glass Electrodes, by B. P.
Mikol'skiy, M. M. Shul'ts, N. V. Pasbekhonova,
9 pp.

RUSSIAN, per, Zhurnal Fiz Khim, Vol XXXII,
No 2, 1958, pp 262-269. 909864

NIH 3-55-62

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Sci - Med

Jun 62

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GF-4

RADUSKEVICH L. V.

Theory of particle precipitation from a gas flow on an isolated cylinder as a function of the filtration process of aerosols

Theorie des Niederschlagens von Teilchen aus der Gasströmung auf einem isolierten Zylinder in Abhängigkeit vom Filtrationsprozess von Aerosolen

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E u r a t o m

Theory of the Separation of a Gaseous Mixture
Under High Pressures, by V. I. Kuz'mich, by
I. Z. Fisher. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 2,
1958, pp 291-297.

DSIR LRU RTS 1038

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Sci - Phys
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Maxima of Thermodynamic Properties and the Transition of Gas to Liquid in the Supracritical Region, by M. G. Kaganer, 20 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958, pp 332-339.

Natl. Res Council of Canada
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Sci - Phys, Chem
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The Effect of the Addition of Organic Solvents on Ion
Exchange Equilibrium of Ions of Alkali Metals on
Sulpho Resin, by b G. M. Panchenkov, et al. UNCL

RUSSIAN, per, Zhur Fiz KHis, Vol XXXII, No 2, 1950,
pp 361-368.

*DSIR/TCL 115

Sci - Chem
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Baranovskii, N. K.
THE KINETICS OF THE MECHANICAL DESTRUCTION OF HIGH POLYMERS. [1960] 13p. 26 refs.
Order from LC or SLA ml\$2.40, rh\$3.30 60-16898

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1958,
v. 32 [no. 2] p. 433-441.

It is shown, that the rate and the limit of mechanical destruction of amorphous polymers depend on their chemical nature. An equation of destruction of amorphous polymers is given. Indicators of destruction degree, giving a many-sided process description, are proposed. (Author)

(Chemistry--Organic, TT, v. 5, no. 3)

60-16898

1. Polymers--Physical factors
2. Polymers--Decomposition
1. Baranovskii, N. K.

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Office of Technical Services

Limits of Applicability of the First Order Kinetic
Equation For Isotopic Exchange, by Ya. M. Varshavskiy,
S. E. Vaisberg, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXXII, No 2, 1958,
pp 454-499.

AEC Tr-3679

Sci - Phys

Apr 69

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Calorimetric Apparatus for Measuring Thermal
Processes Over Long Time Periods, by M. I.
Voskoboinikov, A. P. Kubantsev, 10 pp.
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pp 460-464. 9220446
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Apr 64

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Relationship Between Hydrogen Overvoltage on
Alloys and Their Interatomic Distances, by W. S.
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1958, pp 506-511.

DSIR LLU RTS 1117

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Sci - Phys
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Pal'm, V. A.

AN INVESTIGATION OF THE CHLOROSULPHONATION REACTION. II. KINETICS OF THE CHLORINATION OF p-PHENYLURETHANESULPHONIC ACID BY CHLOROSULPHONIC ACID (Issledovaniye Reaktsii Khloratsii i Kinetika Khlorirovaniya p-Feniluretilansul'fonoy Khloraul'fonovoy Kislotoy). Jan 61 [14]p. 2 refs. RTS 1732.

Order from LC or SLA ml\$2.40, ph\$3.30 61-15640

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1958, v. 32, no. 3, p. 620-627.

The relationship between the absolute value of the acidity function of the medium and the velocity constant for the chlorination of p-phenylurethanesulphonic acid by chlorosulphonic acid has been determined for different temperatures. The variation of the velocity constant with initial concentration of p-phenylurethanesulphonic acid is discussed, and a quantitative theoretical treatment is given. (Author)

(Chemistry--Physical, TT, v. 5, no. 7)

61-15640

1. Sulfonic acids--
Halogenation
2. Chlorosulfonic acid--
Chemical reactions
1. Pal'm, V. A.
- II. Title: Kinetics...
- III. RTS-1732
- IV. Department of Scientific
and Industrial Research
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Theory of the Chromatographic Separation of
Isotopes, by S. E. Bresler.
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
Vol 32, No 3, 1958, pp 628-634. 9232797
AEC MLM-1383

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Theorie de la Separation Chromatographique des Isotopes
(Theory of Chromatographic Separation of Isotopes), by
S. E. Bresler, 12 pp.

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pp 628-634.

Reverse Trans
CEA Tr-R-1006

Sci
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Simultaneous Polarographic Determination of
Oxygen and Hydrogen Peroxide during the Process
of Their Formation under the Action of Radiation,
by V. I. Medvedonskiy, 6 pp.
RUSSIAN, par, Zh. Fiz. Khim., Vol 32, No 4, 1958,
pp 932-934. P911277967
AEC HFP 1r-16

Sci-NS
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The Dependence of the Potential of a Carbon
Reference Electrode on the Oxygen Content of Molten
Cryolite, by L. N. Antipin.

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Dept of Interior
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Sci - Min/Mat
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The Thermodynamic Properties of Air on
Thermal Ionization and the Shock Waves, by
V. V. Salivanov. UNCL

RUSSIAN, per. Zhur Fiz Khim, Vol XXXII,
No 3, 1958, pp 670-677. *1071113*

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SLA M-1000

Sci - Phys
Dec 59

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Apparatus for Determining Pore Size Distribution,
by R. Kh. Burshtein,

RUSSIAN, Izv. Akad. Nauk SSSR, Ser. Khim., Vol. XXXII, No 3,
pp 695-698, 1958,

C.S.I.R.O.

Sci - Chem

May 60

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Isotopic Methods of Study of the Heterogeneity of Active Surfaces and the Interactions in Adsorptive Layer, by S. Z. Roginskiy, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4, 1958, pp 737-745.

SLA 60-14116

Sci

OTS, Vol. III, No 7

Nov 60

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Polikarov, Yu. M. and Gorbunova, K. M.
 SOME PROBLEMS CONCERNING THE THEORY OF
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 THE MECHANISM OF THE FORMATION OF SUPER-
 SATURATED SOLID SOLUTIONS AND OF DI-PHASE
 SYSTEMS DURING THE ELECTRO-DECOMPOSITION OF
 ALLOYS [Nekotorye Voprosy Teorii Elektroosazhdeniya
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Trans. of Zhurnal Fizicheskoi Khimii (USSR, 1958,
 v. 32, no. 4, p. 762-768).

Another translation is available from ATS \$13.75 as
 ATS-81M44R [1960] 8p.

DESCRIPTORS: *Alloys. *Electrodeposition, Crystalli-
 zation, Decomposition.

(Chemistry--Physical, TT, v. 6, no. 6)

61-22857

- I. Polikarov, Yu. M.
- II. Gorbunova, K. M.
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ATS-81M44R
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Office of Technical Services

The Partial Derivatives of the Fundamental
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S. S. Sutyusheva.

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NASA TT F-11,089

Sci-Math
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The Brightness of Electrolytic Deposits and
Its Relation to the Internal and External
Structure of the Deposit, by K. M. Gorkhanova,
A. A. Sutyagina.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4,
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ATS RJ-2061

Sol - Chem
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